



Food and Agriculture Organization
of the United Nations



Reinforcing resilience of banana production systems against the threats of Fusarium wilt disease worldwide

A collaborative initiative for a global programme to
prevent and manage Fusarium wilt disease

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Relevance to FAO

Strategic Objectives:

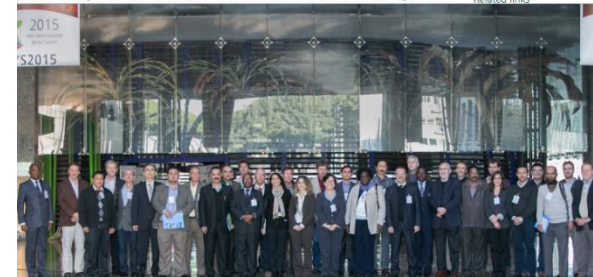
- **SO 2:** Sustainable production
- **SO 3:** **Efficient food systems**
- **SO 5:** Increase resilience to threats
 - **Emergency Prevention System (EMPRES)**

Activities

- **Advocacy / consultations**
 - News releases, events in Rome (CCP, IPPC)
 - International consultations
 - WBF task force activities
 - Awareness raising



A screenshot of the FAO website. The header includes the FAO logo and the text 'Food and Agriculture Organization of the United Nations'. Below the header is a navigation menu with tabs for 'About FAO', 'In Action', 'Countries', 'Themes', 'Media', 'Publications', 'Statistics', and 'Partnerships'. The main content area features a news article titled 'FAO urges countries to step up action against destructive banana disease'. The article text mentions 'Fusarium wilt TR4' and 'livelihoods and banana markets'. There are also sections for 'Read' and 'Audio' with related content.



Activities on the ground

- **Latin America and Caribbean**
 - Workshops (Trinidad and Tobago, Ecuador, Guatemala, Costa Rica..)
 - Assessments, sensitization
 - Contingency planning, diagnostics
 - Regional collaboration, trainings
- **Asia:**
 - Participation in events in Philippines, China (BAPNET, INREF..)
 - Regional collaboration
- **Africa:**
 - Consortium on Foc TR4 strategy for Africa
 - Emergency support to Mozambique
 - Regional projects



Development of a strategy to address the threat of Foc TR4 in Africa

22-23 April, 2014

Stellenbosch, South Africa



Emergency support to Mozambique

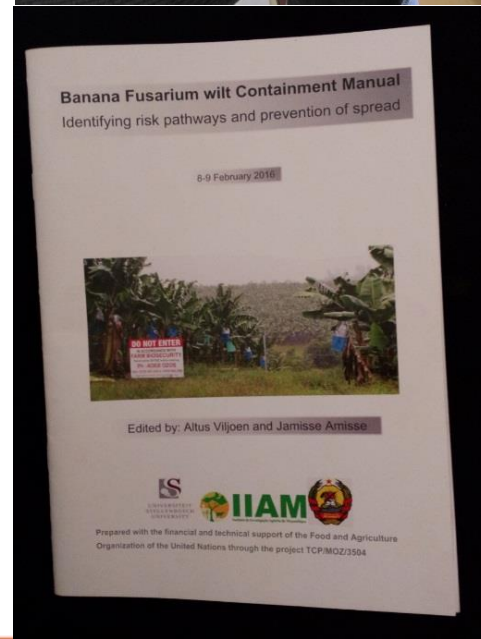
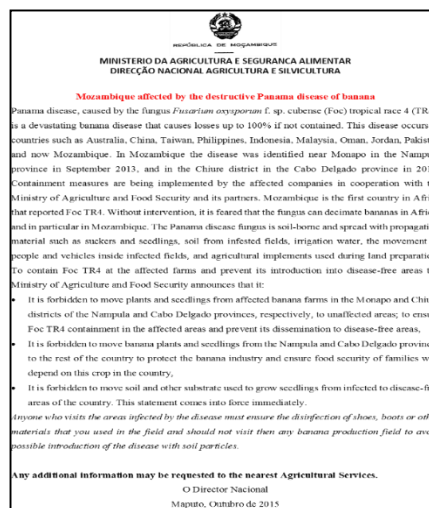
Awareness raising/advocacy

Capacity building/ Training

Surveillance

Containment

National strategy



Global Programme on prevention of Foc TR4

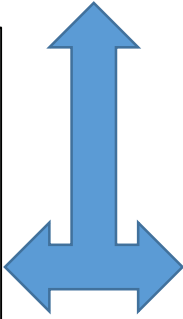
More resilient banana systems with reduced disease risks and impact

Improved **prevention**

Surveillance, monitoring and early warning conducted

Risk **analysis** and phytosanitary **regulations** improved

Containment improved



Improved integrated **management**

Resistance screening and **Variety** development supported

Integrated disease management improved

Enhanced **synergies, capacities** and policy environment for improved prevention and management of Fusarium wilt disease

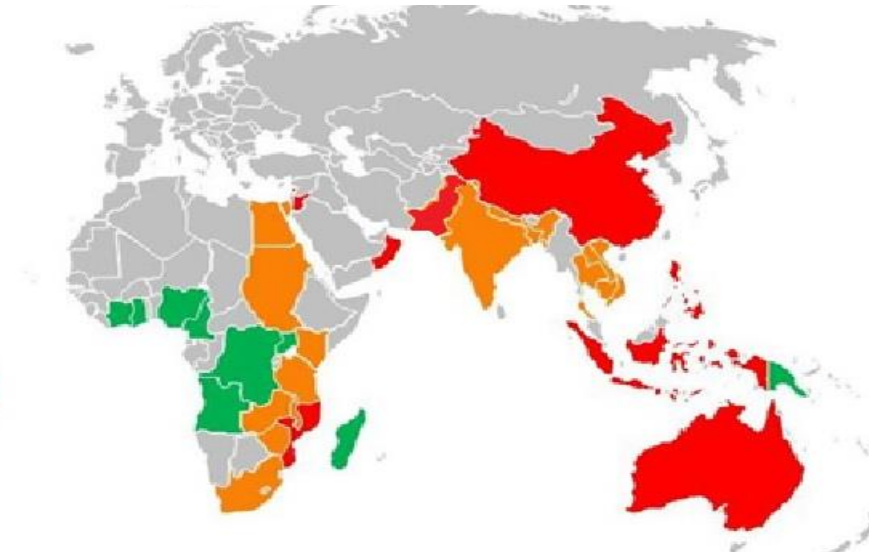
International **collaboration** strengthened

Policies, **strategies**, awareness enhanced

National **capacities** improved

Outcome 1. Enhanced enabling environment and capacities to develop and implement strategies for improved prevention and management of banana Fusarium wilt disease worldwide			Outcome 2. Improved prevention of spread of Foc into non affected areas and countries			Outcome 3. Improved integrated management of the disease at field level	
OUTPUT 1: International synergy, collaboration and knowledge sharing enhanced	OUTPUT 2: Policies, strategies and awareness improved at all levels for effective prevention and management of the disease	OUTPUT 3: Capacities strengthened for improved management, containment and prevention	OUTPUT 4: Surveillance, early detection and monitoring approaches and systems improved	OUTPUT 5: Risks assessed, and phytosanitary regulations and practices enhanced	Output 6: Effective containment measures developed and introduced	Output 7: Collaborative development and deployment of varieties and hybrids with resistance to Foc TR4	OUTPUT 8: Integrated management practices and systems approach improved to suppress the disease at field level
1.1. Promote and support international and regional collaboration and networking to manage Foc globally	2.1. Develop and promote global, regional and national strategies for improved prevention, preparedness and management	3.1. Strengthen technical capacities of regional and national institutions in disease prevention and management	4.1 Provide technical support and guidance for improved diagnosis, surveillance and monitoring	5.1. Conduct pest risk analysis and identify regional and national spread pathways	6.1. Assess and document efficiency of containment methods, tools and measures	7.1. Collect, characterize and conserve genetic resources in search for Foc TR4 resistance	8.1. Assess and document best practices in disease management
1.2. Organize international and regional technical consultations, workshops and meetings	2.2. Develop national and regional contingency plans through improving coordination among stakeholders	3.2. Improve human resources of national institutions in diagnosis, management and prevention	4.2. Develop and introduce early detection and warning tools, approaches and mechanisms	5.2. Assess the status of national phytosanitary regulations and make necessary improvements	6.2. Develop techniques, tools and approaches for disinfection, eradication confinement and suppression	7.2. Screen banana gene pool to identify Foc TR4 resistance sources	8.2. Develop and introduce plant and soil health promoting practices and system approaches to suppress the disease and its impact
1.3. Support technical field study exchanges and south-south collaboration	2.3. Advocate and raise awareness among stakeholders including public institutions, farmers, NGOs and industry	3.3. Strengthen infrastructure of national institutions in surveillance, management and prevention	4.3 Conduct national and regional surveys for updated disease mapping in affected and high-risk areas	5.3. Assess current and potential socio economic impacts of the disease on production and livelihoods	6.3. Introduce and disseminate and implement measures and practices containment and suppression	7.3. Develop varieties and hybrids with resistance to Foc TR4	8.3. Improve seed systems to make fungus free planting materials accessible
1.4 Facilitate knowledge sharing and dissemination internationally and locally	2.4. Analyse and develop policy and financial arrangement options and requirements for management, prevention and containment	3.4. Conduct training for farmers, farm workers and quarantine inspectors in diagnosis, management and prevention	4.4 Facilitate information sharing on disease occurrence and impact	5.4. Support national institutions in implementing phytosanitary measures and standards	6.4. Develop and introduce farm / community level contingency plans for improved preparedness	7.4. On-farm evaluation and deployment of promising varieties and hybrids	8.4. Promote bio-diversification and integrated disease management practices to improve resilience in different production systems

Prioritised actions



Prevention

- Awareness raising
- Regulations
- Preparedness
- Risk assessments
- Contingency planning
- Seed system support

Prevention, preparedness, and response

- Risk assessments
- Regulations
- Contingency planning
- Seed system support
- Resistant / tolerant varieties
- Research and surveillance

Management / Rehabilitation

- Resistant / tolerant varieties
- Seed production support
- Research and dev.
- Agronomic practices
- Cropping system
- Regulations

Approach

■ Principles:

- Complement existing efforts, promote synergies facilitate collaborations,
- Prioritized activities and strategies based on production systems, geographies and risk levels.

■ Collaboration:

- International organizations / institutions / initiatives (Bioversity international, IITA, IAEA...)
- International and regional networks and institutions (Promusa, TFNet...)
- International / Regional Plant Protection Organizations, e.g. IPPC, IAPSC, OIRSA, NEPPO, APPPC...)
- Advanced universities
- National Institutions
- Industry, NGOs (WBF...)

**No panic but
vigilance**

**Planning
critical**

**Threat is
real - Act**

**Prevention
is best**

Work together